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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/510,984

10/13/2004

Masaaki Yamauchi

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05/31/2006

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WASHINGTON, DC 20006-1021

EXAMINER

HINES, ANNE M

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/510,984

Applicant(s)

YAMAUCHI ET AL.

Examiner

Anne M. Hines

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☒ Claim(s) 1 and 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/13/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

The abstract of the disclosure is objected to because the aging process is referred to as by application of a voltage having "an alternate voltage". It appears that this should read "alternating voltage." Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities: Throughout the disclosure the AC plasma display is referred to as an "alternative current plasma display panel." In the art the acronym "AC" stands for "alternating current."

Appropriate correction is required.

### ***Claim Objections***

Claim 1 is objected to because of the following informalities: Claim 1 claims the aging process is performed by application of a voltage having "an alternate voltage." It appears that this should read "alternating voltage." Appropriate correction is required.

Claim 4 is objected to because of the following informalities: Claim 4 claims "wherein the application of the erase discharge-suppressing voltage is provided to the data electrode, and an aging-discharge generating moment-at which the aging discharge takes place in the wake of any one of increase in voltage applied to the scan electrode or decrease in voltage applied to the sustain electrode-carries higher voltage than an erase-discharge generating moment at which the erase discharge takes place after the aging discharge." This is unclear. The Examiner understands this as requiring the erase discharge-suppressing voltage applied to the data electrode to be higher

during the aging discharge than after the aging discharge. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2 rejected under 35 U.S.C. 102(b) as being anticipated by (JP 3439462 B2).

Regarding claims 1, 2, JP '462 discloses a method of aging a plasma display panel containing a scan electrode (Drawing 2, 21), sustain electrode (Drawing 2, 22), and a data electrode (Drawing 2, 12), the method having an aging process for performing an aging discharge by application of voltage having an alternating voltage component between the scan and sustain electrodes, wherein a voltage for suppressing an erase discharge that occurs in the wake of the aging discharge is applied to the data electrode, scan electrode, and sustain electrodes (Drawing 2, 30 & 40; Drawing 1, 30 & 40; Abstract; Description of Drawings).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki et al. (US 6924795) in view of Kado et al. (US 6666738) and Hirano et al. (US 2003/0030377).

Regarding claims 1 and 2, Kawasaki teaches a plasma display panel containing a scan electrode (Fig. 10, 12; Column 12, lines 11-20), sustain electrode (Fig. 10, 11; Column 12, lines 11-20), and a data electrode (Fig. 10, 21; Column 12, lines 11-20), and waveforms for driving the plasma display panel (Figs. 6(B)-6(D); Figs. 8(A)-8(B); Column 4, lines 52-60). Kawasaki fails to teach the method of manufacturing the plasma display panel. However, Kado teaches that during a plasma display panel manufacturing process a PDP must be aged in order to stabilize the luminescence and discharge characteristics of the display (Column 2, lines 16-20). Further, Hirano teaches that PDPs are aged by driving the PDP under practical conditions of use of the PDP (Page 1, Paragraph [0008]). Therefore, it would have been obvious to one of ordinary skill in the art to use the driving waveforms Kawasaki teaches for driving the PDP under practical use to age its PDP in order to stabilize the luminescence and discharge characteristics of the display. Therefore, using the driving waveform of Fig. 6 to age the plasma display panel: Kawasaki teaches a driving/aging waveform for a PDP wherein application of a voltage between the scan and sustain electrodes has an alternating component, and wherein a voltage for suppressing an erase discharge occurs in the

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wake of the aging discharge is applied to the sustain electrode and the data electrode (Figs. 6(B)-6(D); Column 10, lines 19-36; Column 9, lines 12-26).

Regarding claims 3 and 5, Kawasaki further discloses decreasing the discharge suppressing voltage applied to the sustain electrode after the aging discharge takes place (Figs. 8(a)-8(b)).

Regarding claim 4, Kawasaki further discloses wherein the erase discharge-suppressing voltage applied to the data electrode is higher during the aging discharge than after the aging discharge (Fig. 15(b1)-(b2)).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne M. Hines whose telephone number is (571) 272-2285. The examiner can normally be reached on Monday through Friday from 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anne M Hines  
Patent Examiner  
Art Unit 2879

*AMH*  
*5/26/06*

*MS* 5/26/06  
**MARICELI SANTIAGO**  
**PRIMARY EXAMINER**